

REMARKS

Applicants respectfully request reconsideration of the present application. Figures 1 and 2 have been objected to by the Examiner. Accordingly, Applicants propose to amend Figures 1 and 2 by the addition of the legend -- Prior Art -- as suggested by the Examiner. No new matter has been introduced by the amendments. Replacement Sheets of the amended Figures 1 and 2 are enclosed herein for the Examiner to review. Applicants respectfully request the Examiner to approve the amendments proposed.

Office Action Objections and Rejections Summary

Claims 4-7, 12-16 and 20-23 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claims 1-3, 8-11, 17-19, and 24-26 have been rejected under 35 U.S.C. § 102(e) as being anticipated by Rosefield, et al. (US 6,541,996; hereinafter, "Rosefield").

Status of Claims

Claims 1-26 were pending in the present application. Claims 1, 4, 7, 8, 17, 20, 23, 24, and 26 have been amended without introducing any new matter. Claims 2-3, 18-19, and 25 have been canceled without prejudice. Claims 1, 4-17, 20-24, and 26 remain pending.

Allowable Subject Matter

Claims 4-7, 12-16 and 20-23 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. Accordingly, Applicants have amended claims 4, 7, 20, and 23 to include all of the limitations of their respective base claims and any intervening claims. Claims 5-6 and 12-16 depend, directly or indirectly, from claim 4, and thus, include the limitations set forth in claim 4. Claims 21-22 depend, directly or indirectly, from claim 20, and thus, include the limitations set forth in claim 20. It is respectfully submit that claims 4-7, 12-16 and 20-23 are now in condition for allowance and such action is earnestly solicited.

Claim Rejections

The Examiner has rejected claims 1-3, 8-11, 17-19, and 24-26 under 35 U.S.C. § 102(e) as being anticipated by “Rosefield”. Claims 2-3, 18-19, and 25 have been canceled without prejudice, and thus, obviating the rejections on claims 2-3, 18-19, and 25. Applicants respectfully traverse the rejections on claims 1, 8-11, 17, 24, and 26. Claim 1 as amended recites “the comparator is operable to calibrate the second pull-up structure *directly* against the reference impedance.” (Claim 1 as amended, emphasis added). It is respectfully submitted that Rosefield fails to disclose at least the above limitation.

According to Rosefield, the on-chip programmable pull up impedance matching array 204 is configured to effectively match the impedance of the external resistor 114. The

configurable on-chip impedance element 208 is set to the impedance value determined for the pull-up impedance matching array 204, then the programmable pull down impedance matching array 206 is set using the configurable on-chip impedance element 208 as its reference. (Rosefield, col. 7, ln.19-27). In other words, the on-chip impedance element 208, which the Examiner analogized to be the second pull-up structure as claimed (Office Action, p. 3, ln. 6), is not directly calibrated against the external resistor 114, but *indirectly* via the pull-up impedance matching array 204. Therefore, Rosefield fails to disclose a comparator operable to calibrate the second pull-up structure directly against the reference impedance. For at least this reason, Rosefield does not anticipate claim 1 as amended. Withdrawal of the rejection is respectfully requested.

Claim 8 as amended depends from claim 7. Therefore, having added limitations, claim 8 is allowable for at least the reason discussed above with respect to claim 7. Applicants respectfully request withdrawal of the rejection on claim 8.

Claims 9-11 depend from claim 1, and thus, include the limitations set forth in claim 1. For at least the reason discussed above with respect to claim 1, claims 9-11 are not anticipated by Rosefield. Applicants respectfully request withdrawal of the rejections.

Claim 17 as amended recites, “calibrating the second pull-up structure with the comparator *directly* against the reference impedance” (claim 17, emphasis added). According to Rosefield, the on-chip programmable pull up impedance matching array 204 is configured to effectively match the impedance of the external resistor 114. The configurable on-chip impedance element 208 is set to the impedance value determined for the pull-up impedance

matching array 204, then the programmable pull down impedance matching array 206 is set using the configurable on-chip impedance element 208 as its reference. (Rosefield, col. 7, ln.19-27). In other words, the on-chip impedance element 208, which the Examiner analogized to be the second pull-up structure as claimed (Office Action, p. 3, ln. 6), is not directly calibrated against the external resistor 114, but *indirectly* via the pull-up impedance matching array 204. Therefore, Rosefield fails to disclose calibrating the second pull-up structure with the comparator *directly* against the reference impedance. For at least this reason, Rosefield does not anticipate claim 17 as amended. Applicants respectfully request withdrawal of the rejection.

Claim 24 as amended sets forth means for calibrating a second pull-up structure *directly* against the reference impedance (claim 24, emphasis added). According to Rosefield, the on-chip programmable pull up impedance matching array 204 is configured to effectively match the impedance of the external resistor 114. The configurable on-chip impedance element 208 is set to the impedance value determined for the pull-up impedance matching array 204, then the programmable pull down impedance matching array 206 is set using the configurable on-chip impedance element 208 as its reference. (Rosefield, col. 7, ln.19-27). In other words, the on-chip impedance element 208, which the Examiner analogized to be the second pull-up structure as claimed (Office Action, p. 3, ln. 6), is not directly calibrated against the external resistor 114, but *indirectly* via the pull-up impedance matching array 204. Therefore, Rosefield fails to disclose means for calibrating a second pull-up structure *directly* against the reference impedance. For at least this reason, Rosefield does not anticipate claim 24 as amended. Applicants respectfully request withdrawal of the rejection.

Claim 26 depends from claim 24, and thus, includes the limitations set forth in claim 24. For at least the reason discussed above with respect to claim 24, claim 26 is not anticipated by Rosefield. Applicants respectfully request withdrawal of the rejection on claim 26.

Conclusion


Applicants respectfully submit that the present application is in condition for allowance. If the Examiner believes a telephone conference would expedite or assist in the allowance of the present application, the Examiner is invited to call C. Teresa Wong at (408) 720-8300.

To the extent necessary, a petition for an extension of time under 37 C.F.R. 1.136 is hereby made. If any other petition is necessary for consideration of this paper, it is hereby so petitioned.

Pursuant to 37 C.F.R. 1.136(a)(3), Applicants hereby request and authorize the U.S. Patent and Trademark Office to (1) treat any concurrent or future reply that requires a petition for extension of time as incorporating a petition for extension of time for the appropriate length of time and (2) charge all required fees, including extension of time fees and fees under 37 C.F.R. 1.16 and 1.17, to Deposit Account No. 02-2666.

Respectfully submitted,
BLAKELY, SOKOLOFF, TAYLOR & ZAFMAN LLP

Date: August 31, 2005



Chui-kiu Teresa Wong
Reg. No. 48,042

Customer No. 008791
12400 Wilshire Boulevard
Seventh Floor
Los Angeles, CA 90025-1030
(408) 720-8300

Inventor(s): Hari Om
Application No.: 10/773,816
Cypress Ref. No.: CD02214

- 13/13-

Examiner: Cho, James Hyonchol
Art Unit: 2819
BSTZ Ref. No.: 16820P277